



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/857,047	08/30/2001	Miguel-Angel Garcia-Martin	027566-029	7797

27045 7590 06/01/2005

ERICSSON INC.  
6300 LEGACY DRIVE  
M/S EVR C11  
PLANO, TX 75024

EXAMINER

LE, VIET Q

ART UNIT PAPER NUMBER

2667

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/857,047	<b>Applicant(s)</b> GARCIA-MARTIN ET AL.	
	<b>Examiner</b> Viet Q. Le	<b>Art Unit</b> 2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 & 9-11 is/are rejected.
- 7) ☒ Claim(s) 7 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Gessel et al. (U.S. 5,732,213), hereinafter referred to as Gessel.

Regarding claim 1, Gessel disclosed a method of transmitting signaling information in a telecommunications network between peer user / application parts (See figure 2 where applications are per to peer communicated across TCP/IP transport protocol), the method comprising: transferring signaling information from a first user / application part (Figure 3, application user at level 7 like TCAP of the protocol OSI stack) to a Message Transfer Part (MTP) level 3 (Figure 3, MTP-3 of box 32), the information including a destination signaling point identifier identifying the signaling point at which the peer user/application part is located (Figure 3, area 30. TCAP application is peer-to-peer communication across TCP/IP. It is inherently that message coming from the top of the protocol stack must have the signaling point identifier identifying where the peer application is located); determining at the MTP level 3, from said destination signaling point identifier (Figure 3, MTP-3 residing at layer 3 indicated by column 1,

Art Unit: 2667

lines 54-55 to do routing and switching functions based on information overhead passing from the top of the protocol stack), a destination address (Figure 3, area 30. TCAP application is peer-to-peer communication across TCP/IP. It is inherently that message coming from the top of the protocol stack must have the signaling point identifier identifying where the peer application is located) suitable for conveying the signaling information to the destination signaling point or to an intermediate signaling point en route to the destination signaling point; and, in the event that said destination address is an Internet Protocol (IP) address and port number (Figure 3, boxes 31-33. MTP-3 of layer 3 make the decision and then passing it on to box 31 of TCP/IP for transporting application across the channel), transferring the signaling information and the determined IP address and port number to an IP part for transmission over an IP network to the destination or intermediate signaling point.

Regarding claim 2, Gessel disclosed a method comprising transferring the signaling information to an MTP level 2 in the event that the destination address determined by the MTP level 3 is a signaling link, and transmitting the information to the destination signaling point, or to an intermediate signaling point, over the signaling link (Figure 5, box 22. This is the traditional SS7 protocol of passing on information from the user application on to MTP-3, MTP-2 and MTP-1 layer).

Regarding claim 3, disclosed a method comprising: receiving the signaling information transmitted over the IP network at the signaling point identified by said IP address and port number (Figure 3, box 33. TCP/IP information arriving at MTP-3 across the channel from the transmitting stack), and passing the signaling information to

an MTP level 3 and determining whether or not the signaling point is the destination signaling point on the basis of said destination signaling point identifier included in the signaling information (Figure 3, box 31-33. Information coming from the TCP/IP layer is being passed on to MTP-3 layer).

Regarding claim 4, disclosed a method comprising passing the signaling information to the peer user/application part in the event that the receiving signaling point is the destination signaling point (See figure 2 where applications are per to peer communicated across TCP/IP transport protocol. See figure 5, boxes 20, 22 and 23. If messages are SS7, then messages are processed from top of the stack to MTP-3 to MTP-2 and MTP-1 layer).

Regarding claim 5, disclosed a method comprising determining at the MTP level 3 a further destination address, on the basis of the destination signaling point identifier, suitable for conveying the signaling information to the destination signaling point or to another intermediate signaling point, if the receiving signaling point is not the destination signaling point (Figure 3, area 30. TCAP application is peer-to-peer communication across TCP/IP. It is inherently that message coming from the top of the protocol stack must have the signaling point identifier identifying where the peer application is located. Obviously, messages are only delivered to the intended user end point of the message and not terminated at the intermediate point);

Regarding claim 6, disclosed a method comprising providing a look-up table at a transmitting signaling point, which table maps signaling point identifiers to IP addresses and port numbers or to signaling links (Figure 3, area 30. Column 1, lines 54-55. MTP-3

Art Unit: 2667

layer is at the layer 3 of the OSI stack. Its function is to do routing and switching. It is inherently that at this MTP-3 layer, the node must have the look up table where they would know where the packets or messages would be mapped to which addresses);

Regarding claim 11, Gessel disclosed an apparatus for transmitting signaling information in a telecommunications network between peer user/application parts (Figure 2. Signaling information is sent peer to peer across the channel using TCP/IP), the apparatus comprising:

First processing means implementing a Message Transfer Part (MTP) level 3 for receiving signaling information from a first user / application part (Figure 3, box 32. Signaling information passing on down to MTP-3 layer), the information including a destination signaling point identifier identifying the signaling point at which the peer user / application part is located (Figure 3, area 30. TCAP application is peer-to-peer communication across TCP/IP. It is inherently that message coming from the top of the protocol stack must have the signaling point identifier identifying where the peer application is located), the MTP level 3 determining from said destination signaling point identifier, a destination address suitable for conveying the signaling information to the destination signaling point or to an intermediate signaling point en route to the destination signaling point (Column 1, lines 54-55. MTP-3 layer is the layer 3 of OSI stack designed to do routing and switching functions. It must have information passing on from above the stack to know where to route each packets to their destination) and,

Second processing means implementing an IP part for transmitting the signaling information and the determined IP address and port number over an IP network to the

Art Unit: 2667

destination or intermediate signaling point, in the event that said destination address is an IP address and port number (Figure 3, boxes 31-33. MTP-3 passing information or packets using TCP/IP channel. Because MTP-3 layer is a layer of OSI stack doing the routing and switching functions, it must know where to route the packets to their destinations using the IP addresses and port).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gessel in view of the admitted art in the applicant's instant application. Hereinafter referred to as Martin.

Regarding claim 9-10, Gessel disclosed a method of transporting signaling information across either using TCP/IP or using SS7 protocol as described in claim 1 above.

Gessel, however, failed to disclose the signaling point identifier has a Network Indicator plus "Network identifier - Network Cluster - Network Cluster Member" format.


Art Unit: 2667

Martin admitted in his instant application that the signaling point identifier would have a Network Indicator plus "Network identifier - Network Cluster - Network Cluster Member" format (See page 5, lines 13-15).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further define the signaling point identifier would have a Network Indicator plus "Network identifier - Network Cluster - Network Cluster Member" format, the motivation being that by complying to this format, one would comply to the US standard.

***Allowable Subject Matter***

5. Claims 7-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

  
KENNETH VANDERPUYE  
PRIMARY EXAMINER